

WHAT IS CLAIMED IS:

1. A method for modulating, in a host cell, a protein-protein interaction between a first protein which is PRAK and a second protein which is ERK3, said method comprising:

5 administering to said cell a compound capable of modulating said protein-protein interaction.

2. The method of Claim 1, wherein said compound is capable of interfering with the interaction between said first protein and said second protein.

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3. The method of Claim 1, wherein said compound is capable of binding at least one of said first protein and said second protein.

4. The method of Claim 1, wherein said compound comprises a peptide having
15 a contiguous amino acid sequence of ERK3 and is capable of binding PRAK.

5. The method of Claim 1, wherein said compound comprises a peptide capable of binding PRAK and has an amino acid sequence that is at least 75% identical to a contiguous amino acid sequence of ERK3.

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6. The method of Claim 1, wherein said compound comprises a peptide having a contiguous amino acid sequence of PRAK and is capable of binding ERK3.

7. The method of Claim 1, wherein said compound comprises a peptide capable
25 of binding ERK3 and has an amino acid sequence that is at least 75% identical to a contiguous amino acid sequence of PRAK.

8. The method of Claim 1, wherein said compound is an antibody immunoreactive with PRAK or ERK3.

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9. The method of Claim 1, wherein said compound is a nucleic acid encoding an antibody immunoreactive with PRAK or ERK3.

10. The method of Claim 1, wherein said compound is selected from the group
5 consisting of: (1) an antisense compound and/or ribozyme capable of specifically hybridizing to a nucleic acid having a sequence encoding ERK3, and (2) an antisense compound and/or ribozyme capable of specifically hybridizing to a PRAK nucleic acid.

11. The method of Claim 1, wherein said compound is a peptide capable of
10 interfering with the interaction between said first protein and said second protein, wherein said peptide is associated with a transporter capable of increasing cellular uptake of said peptide.

12. The method of Claim 11, wherein said peptide is covalently linked to said
15 transporter which is selected from the group consisting of penetratins, *l*-Tat₄₉₋₅₇, *d*-Tat₄₉₋₅₇, retro-inverso isomers of *l*- or *d*-Tat₄₉₋₅₇, L-arginine oligomers, D-arginine oligomers, L-lysine oligomers, D-lysine oligomers, L-histidine oligomers, D-histidine oligomers, L-ornithine oligomers, D-ornithine oligomers, short peptide sequences derived from fibroblast growth factor, Galparan, and HSV-1 structural protein VP22, and peptoid analogs thereof.

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13. A method for treating inflammation and inflammatory disorders (e.g., asthma, rheumatoid arthritis, juvenile chronic arthritis, myositis, Chron's disease, gastritis, colitis, ulcerative colitis, inflammatory bowel disease, proctitis, pelvic inflammatory disease, systemic lupus erythematosus, rhinitis, conjunctivitis, scleritis, chronic inflammatory
25 polyneuropathy, Tertiary Lyme disease, psoriasis, dermatitis, eczema, etc.) , comprising:
identifying a patient in need of treatment of the disease; and
administering to a patient in need of such treatment a compound capable of interfering with the interaction between a first protein which is PRAK and a second protein which is ERK3.

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14. The method of Claim 13, wherein said compound is capable of binding at least one of said first protein and said second protein.

15. The method of Claim 13, wherein said compound comprises a peptide
5 having a contiguous amino acid sequence of ERK3 and is capable of binding PRAK.

16. The method of Claim 15, wherein said peptide is associated with a transporter capable of increasing the cellular uptake of said peptide.

10 17. The method of Claim 13, wherein said compound comprises a peptide having a contiguous amino acid sequence of PRAK and is capable of binding ERK3.

18. The method of Claim 17, wherein said peptide is covalently linked to a transporter capable of increasing the cellular uptake of said peptide.

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19. The method of Claim 17, wherein said peptide is covalently linked to said transporter which is selected from the group consisting of penetratins, *l*-Tat₄₉₋₅₇, *d*-Tat₄₉₋₅₇, retro-inverso isomers of *l*- or *d*-Tat₄₉₋₅₇, L-arginine oligomers, D-arginine oligomers, L-lysine oligomers, D-lysine oligomers, L-histidine oligomers, D-histidine oligomers, L-
20 ornithine oligomers, D-ornithine oligomers, short peptide sequences derived from fibroblast growth factor, Galparan, and HSV-1 structural protein VP22, and peptoid analogs thereof.

20. The method of Claim 13, wherein said compound is selected from the group consisting of: (1) an antisense compound and/or ribozyme capable of specifically
25 hybridizing to a nucleic acid having a sequence encoding ERK3, and (2) an antisense compound and/or ribozyme capable of specifically hybridizing to a PRAK nucleic acid.